

Donovan C Lawrence

University of Johannesburg

Students' Experiences of Using Mobile Phones for Afrikaans Vocabulary Development

ABSTRACT

The proliferation of mobile technology presents an opportunity for (language) teachers to experiment with using mobile devices to enhance the learning process. However, research in Mobile-Assisted Language Learning (MALL) is relatively new and unexplored in South Africa, resulting in a lack of empirical evidence to guide such curriculum integration and implementation.

This study was undertaken to investigate students' experiences using their mobile phones to develop Afrikaans vocabulary. As an out-of-class activity, they received mini vocabulary lessons on their mobile phones. The retention of target words was then assessed and reinforced during text-based activities.

The findings confirm that using a mobile phone as a learning tool allows learning to take place anywhere, anytime and serves as a bridge between formal and informal learning. When used for vocabulary development, the choice of app, the type of activity, the content and size of the message impact on the learning experience.

Keywords: Mobile-Assisted Language Learning, WhatsApp, vocabulary development, Afrikaans

1. Background

Since the first cellular service was introduced in South Africa 21 years ago, we have seen many changes with regard to the availability and use of mobile phones.

Worldwide, there has been an increase in the use and ownership of mobile devices and, according to the 2012 Global Entrepreneurship Monitor, the number of mobile phones and active SIM cards in South Africa is currently at a point where it outnumbers the total population. Furthermore, the number of adult users has increased from 17% in 2000 to 76% in 2010. The most probable reason for this would be that mobile phones have become more affordable and therefore accessible to more people.

In terms of use, the mobile phone has evolved from an instrument used primarily for making and receiving voice calls and sending text messages to a tool used more for its secondary functions, such as sending and receiving photos, audio and video files, playing mobile games, and gaining access to the internet, social media and instant messaging.

This change in availability and functionality presented new possibilities for the integration of not only mobile phones but also other mobile devices, such as Mp3 players, iPods, notebooks, tablets and iPads in learning contexts (m-learning). At universities in particular there is a steady rise in the use of mobile devices to access educational resources, tools and materials or to enhance online interactions and the sharing of knowledge, whether by means of synchronous or asynchronous communication modes between lecturers and students or among students (Groupe Speciale Mobile Association 2010; Echeverria *et al.* 2011).

Educators worldwide seem to recognise the instructional potential of mobile technology and are constantly seeking ways to integrate these technologies to enhance learning and teaching. In South Africa there are a few examples of mobile learning projects focusing on the enhancement of learning through the incorporation of mobile devices. These projects include the following examples:

- **MobilED:** This 3-year international collaborative project was designed to give learners with low-level phones access to the internet and information on the World Wide Web. A meaningful learning environment is created using an Audio Wiki platform. Learners can send an SMS with a search term to Wikipedia. The server then responds with a return call where the article is read using a speech synthesiser (Ford & Botha 2007).
- **HaDeDa:** This is a spelling tutor designed to encourage practicing the spelling of words. The language teacher creates a spelling list in English or Afrikaans and Hadededa then generates a fun application using multiple text-to-speech engines. The application can then audibly “speak” the vocabulary words to the learner (Butgereit & Botha 2009).

- **IGLOO** (Information Gathering and Lesson Tool): This is a tool educators can use to design multimedia questionnaires, tests and quizzes in the form of open-ended or multiple-choice questions. These can be used to facilitate pedagogical practices in formal and informal learning practices. To make it more accessible, IGLOO can run on mobile phones independent of GPRS connectivity or functionality (Samuel *et al.* 2009).
- **Dr Maths:** This service uses the instant messaging service MXit as a learning platform, allowing users to receive maths tutoring by accessing tutors on their cell phones via the MXit network. It provides real-time support and assistance with mathematics homework and revision by means of discussion and interaction.

Deleted:

1.1 MALL as an alternative for CALL

This paper argues that, in the South African context, Mobile-Assisted Language Learning (MALL) is a better option than Computer-Assisted Language Learning (CALL). In the literature about ICT integration in SA schools there are several success stories. Unfortunately, however, educational institutions, especially previously disadvantaged schools, also face many challenges that prevent successful integration.

When taking the first step to implement e-learning, a typical South African school may be confronted with financial constraints resulting from declining support from government and/or parents not being able to pay school fees. Should these be overcome, resistance from staff due to fear of change or not being able to handle the new technology may come into play. Once e-learning has been integrated, the school may also be faced with issues of accessibility. The fact that most educational software products are available in English and very few in local, indigenous languages also impacts on their successful use and integration (Mdlongwana 2012:4). There is also the danger of online bullying and the responsibility that schools have to educate learners to become responsible digital citizens who understand the importance of netiquette, mobiquette and general online safety. In order to help with this, schools should design and implement user policies, provide guidelines in this regard and keep track of emerging technologies.

On 21 July 2015, the Gauteng MEC for Education, Panyaza Lesufi, announced the start of the paperless classroom, signalling a commitment and move towards digital learning through

the use of laptops and tablets. To enhance accessibility, each of these devices will have unlimited data bundles from 5 am to 9 pm every day. As a result, learners will be able to use their mobile devices as a learning tool in the classroom as well as at home. These devices can therefore be used to not only enhance the learning experience but also to bridge the gap between formal as well as informal learning, thereby supporting learning outside the dedicated learning environment and formal curriculum (Trentin & Repetto 2013). Unless this bold step towards m-learning is accompanied by a clearly defined user policy designed by stakeholders including parents, teachers and learners, it will not accomplish its intended goal.

Although the idea of a paperless classroom may soon become a reality in Gauteng schools, it is still a far-off dream for the majority of South African schools confronting financial, staff and language issues. And while we wait for these issues to be resolved, the digital divide in South Africa is widening by the day.

Mobile phones on the other hand, when compared with computer hardware and software necessary for ICT integration, are more affordable and therefore more accessible for use by learners. In essence, it provides a cheaper alternative and access to not only synchronous and asynchronous online communication but also to information resources on the World Wide Web, as most mobile phones do nowadays. When combined with the ubiquity and affordability of an instant messaging service like WhatsApp (which can serve as a learning platform), it opens up a myriad of possibilities for m-learning, which in turn makes it more accessible to more learners and, in doing so, extends the use of mobile phones beyond the walls of the classroom.

The motivation to use WhatsApp as a learning platform is further strengthened when one takes into account that in 2013 it was rated the most downloaded application in 127 countries with over 450 million monthly active users sharing 700 million photos and 10 billion messages daily. In South Africa, more than half of the urban adult mobile phone users (at least 10,6 million) are using WhatsApp. The market for social media and instant messaging services in South Africa is unfortunately also characterised by an urban-rural divide. Only 37% of people outside urban areas use WhatsApp (Olanof 2012, Cohavi 2013, Tzuk 2013; SouthAfrica.info 2014).

1.2 Pedagogy

Naismith *et al.* (2004) classify m-learning activities around relevant learning theories and learning areas. Six main themes are identified:

- **Behaviourist** activities that promote learning as a change in observable actions.
- **Constructivist** activities in which learners actively construct new ideas or concepts based on prior or existing knowledge.
- **Situated** activities that promote learning within an authentic context or culture.
- **Collaborative** activities that promote learning through social interaction.
- **Informal and lifelong** activities that support learning outside a dedicated learning environment and formal curriculum.
- **Learning and teaching support** activities that assist in the coordination of learners and resources for learning activities.

When it comes to Mobile-Assisted Language Learning (MALL), the most obvious advantage for learners would be the access they have to target language content anywhere and at any time (Geddes 2004; Thornton & Houser 2003, 2004, 2005).

In this case study, MALL was used as an example of intentional informal learning (Naismith *et al.* 2004: 3) and the mobile phone was used as learning and teaching tool in an effort to develop Afrikaans L2 students' subject-specific vocabulary and at the same time increase their exposure to Afrikaans inside and outside the classroom. The popular instant messaging (IM) service WhatsApp was used as the learning and teaching platform mainly because of its ability to send and receive a variety of media, including text, images, video and audio.

In a broader sense, the integration of MALL in the learning of Afrikaans as a First Additional Language and specifically to develop vocabulary can be founded on the social constructivist learning paradigm where technology is used as a tool that supports and

enhances communication, interaction, collaboration and in particular the construction of knowledge within a particular context.

2. Methodology

When I started teaching this course, the group's lack of vocabulary was apparent. It prevented them from taking part in class discussions and impacted on their reading and understanding of Afrikaans texts. In addition, the course, being a Language for Specific Purposes course, required them to master a subject-specific Afrikaans vocabulary to be used in the legal environment they will find themselves in after graduation. As an intervention, I decided to adapt the course by integrating the use of mobile phones and to use it as case study to gain insight in students' specific experience of mini vocabulary lessons and their general attitude towards MALL.

From the outset it was important that the integration of mobile phones in this course would not just be a "nice to have" but that the online mini vocabulary lessons should be designed to promote the learning or acquisition of Afrikaans vocabulary (**Behaviourist**) and that students would be able to use it inside or outside the classroom (**Informal and lifelong**).

2.1 Test population: language ability and use of mobile phones

The research group for this study consisted of five undergraduate students (one male and four female) all between the ages of 19 and 21 and studying Afrikaans L2 as part of their Law Degree Curriculum at the University of X. In spite of them all having passed Afrikaans as a First Additional Language in matric, they had varying degrees of proficiency in and exposure to Afrikaans. The results of a pre-study questionnaire (*Appendix A*) indicate that their abilities range from good (Student A) to weak (Student D) in reading, writing, speaking and listening. Students B and C described only their listening ability in Afrikaans as good but their speaking, reading and writing abilities as average.

The heterogeneity of the research group is further influenced by their differing social backgrounds and varying levels of exposure to Afrikaans in their everyday lives. Student A,

for example, lives in an environment where he speaks, listens to and reads Afrikaans on a daily basis, while the rest of the group only hears or reads it in class and will only speak it when absolutely necessary or expected.

To establish which functionality of the cell phone would be more feasible to use, a pre-study questionnaire was designed. The results (*Appendix B*) indicate that, apart from making and receiving calls, everyone uses their cell phones for sending and receiving text messages and chatting, using WhatsApp (as opposed to other instant messaging services, like BBM, WeChat or MXit). Other user functions included sending and receiving emails and gaining access to Facebook and browsers such as Google. In addition, they use their mobile phones for taking and sending photos, recording and sending audio and video messages and playing mobile games.

2.2 Out-of-class activities

In an effort to develop students' Afrikaans vocabulary and increase their exposure to Afrikaans, students received mini vocabulary lessons on their mobile phones over a period of seven weeks (one term). At this point I was undecided on whether to use SMS or WhatsApp and opted to start out with SMS. The vocabulary lessons sent each week consisted of difficult words taken from the text that was to be read, analysed and discussed in class the following week. Engaging with these words beforehand therefore served as a pre-reading activity for the students. Different formats (single or multiple lexical items in the target or source language) and combinations of media (text with related visual presentations and/or sound) were used.

At most, 5 words a day were sent on 3 days a week in order not to flood or overwhelm the students. The total number of words sent depended on the level of complexity of each text. I further decided to vary the format and design of each week's mini lesson to gauge the students' experience of different formats and different combinations of media.

2.3 In-class activities

At the start of each lesson students were assessed on the vocabulary received on their phones. To support the viewpoint of Kennedy & Levy (2004: 458), the vocabulary test was not part of students' formal assessment as the focus was on the learning experience itself and not the number of lexical items successfully retrieved. They would therefore complete an open-ended questionnaire detailing their experience of the week's mini vocabulary lessons: what they enjoyed most; enjoyed least and why. Once this was done, the lesson would continue by reading, discussing and analysing the text, thereby giving them the opportunity to further explore the contextualised meaning and use of the target words.

3. Data Analysis

Students' experiences relating to perceived value	... ease of remembering	... ease of understanding
Week 1			
What did you enjoy most of the SMS lessons you received this week and why?	<i>I enjoyed the fact that the mini-lessons were convenient and stimulating.</i>	<i>Getting pictures and voice make learning and remembering the vocabulary easier.</i>	
What did you enjoy least of the SMS lessons you received this week and why?	<i>I enjoyed that I wouldn't lose the words because they were on my phone and that I always had them with me.</i>	<i>The words were short and the messages did not contain too many words so it was easier to remember the words in short segments. It helps to remember short lessons when they are in the form of text messages.</i>	
Do you have any suggestions or recommendations I can use to improve the use of SMS lessons?	<i>SMSs are not as convenient as WhatsApp messages.</i> <i>Rather use WhatsApp or BBM. I did not know if I received all the messages.</i> <i>A group would be better so we could be all on the same page.</i> <i>A WhatsApp group would be better. It will also be a forum through which we can all be on the same page as well as</i>		

communicate with each other.

Students' experiences relating to ...

... perceived value

... ease of remembering

... ease of understanding

Week 2

How do you feel about the use of **WhatsApp** compared to SMS last week?

WhatsApp was a better foundation because not many of us use SMSs anymore.

I like the use of voice notes and pictures as it helps me remember things easier, as well as it being a nice different medium of learning.

The pictures and voice notes guide us to understand the meaning of the words. But I prefer the pictures because it illustrates more information.

How do you feel about the use of **sound** (voice note) and **pictures**? Do you prefer the sound or the picture or maybe both? Why?

People rather use WhatsApp lately to communicate.

The voice note helps as it shows us how the word is properly pronounced. I don't really look at the pictures.

I like both pictures and voice notes – it makes the whole situation more interesting to learn.

WhatsApp is much more convenient and allows all students to receive the same number of words so there is no confusion.

The use of voice notes is useful as it assists in clarifying the pronunciation of words, making them easier to recognise in a conversation. I prefer both the sound and picture.

The sound helps with pronunciation of the words into context and helps clarify the meaning if it is unclear or has more than one meaning.

I felt that by receiving the words on WhatsApp I knew everyone had received exactly the same as me.

The use of WhatsApp is much more convenient.

All students are on the same page and it's an easily accessible open forum for us all.

WhatsApp is definitely easier as it enables us to communicate with our whole class and it also ensures that we all get the same / correct amount of words.

I prefer WhatsApp to normal SMSs due to lower cost rates.

Students' experiences relating to ...

... perceived value

... ease of remembering

... ease of understanding

Week 3

How do you feel about the fact that the **mini-lessons did not contain any definitions, translations, pictures or voice notes**?

I felt that it helped me to look up the words and meanings myself and not basically relying on the SMS lessons to find the meanings but instead it helped me to go look for the words in the dictionary myself.

The WhatsApp messages were much easier to follow when it was just the words we needed to translate ourselves. However I did not remember as much as I did with the previous WhatsApp lessons.

I felt indifferent about it. In a sense it is good because we learn while we look for the definitions.

I don't think having to go and find the definitions helped me learn the words more. I was indifferent to having the pictures and voice notes, i.e. I didn't mind not having them or if I had them I wouldn't mind too.

It was OK without any pictures or voice notes although I don't think having to look up the words myself benefited me in any way. I did think it would help me remember them faster but I'm not sure it did.

I found the words easier to remember as I was forced to look up, define and therefore learn the text on my own. This enabled me to concentrate on the words provided.

Students' experiences relating to ...

... perceived value

... ease of remembering

... ease of understanding

Week 4

How do you feel about the fact that the words in the mini-lessons this time were in **English** and you had to find the **Afrikaans** words in the text I gave you?

It was a bit harder this time because I had to remember the exact spelling of the words in Afrikaans, same words in English are just two words where in Afrikaans it is just one word.

Finding the Afrikaans word in the text was slightly easier because you can use your other knowledge to put the word in context and then assume what Afrikaans word matched the English word.

It took more time to do but I personally don't feel that it helps me remember.

I found it a bit harder to remember the Afrikaans word and spelling rather than the English translation.

I remember the words less when I have to find the Afrikaans word for the English text words.

Students' experiences relating to ...

... perceived value

... ease of remembering

... ease of understanding

Week 5

Once again I sent you **the Afrikaans word; the pronunciation, the English translation (except for the last 5 words) and a picture** relating to help you

It gets confusing when all pictures are sent in unison with their words.

It is best when we have a picture, a sound clip, the

I actually find that listening to the voice notes of the words do help with me remembering them and associating them with

The pronunciation of the words help me to pronounce the words better and the pictures relating to the words definitely helps me to

understand the meaning of each word. Any comments about this?	<i>Afrikaans word and then the translation.</i>	<i>the English word. It also helps me pronounce it better which helps me remember it better.</i>	<i>understand what the word means.</i>
Students' experiences relating to perceived value	... ease of remembering	... ease of understanding
Week 6 This week you received phrases instead of single words . How do you feel about this?	<i>They were useful phrases to know / learn but because they were longer and more complicated, it made them a bit harder to learn.</i>	<i>It was a lot harder to remember this time and I actually forgot some of the words.</i> <i>The phrases were very difficult to remember. I prefer single words to learn in our sms lessons.</i>	
Students' experiences relating to perceived value	... ease of remembering	... ease of understanding
Week 7 This week you received 10 Afrikaans sentences with the English translations . Was it easier or more difficult to understand and remember? How did you experience it? Did you miss the voice notes?		<i>The sentences were harder to remember compared to just single words, but when put in context not so hard to understand. I didn't really miss the voice notes. However by learning some of the single word previously seeing them in the sentence I knew what some of it meant already.</i> <i>Although the ones I didn't recognize were harder to remember because of the long sentences. I don't usually listen to the voice notes.</i>	<i>It made me realize how much my Afrikaans has expanded because I was able to understand some of the sentences without having to look at the English.</i>

Table 1: Data analysis

4. Discussion of research findings

4.1 What's up with WhatsApp?

The first set of mini vocabulary lessons was sent individually to each member of the group using SMS.

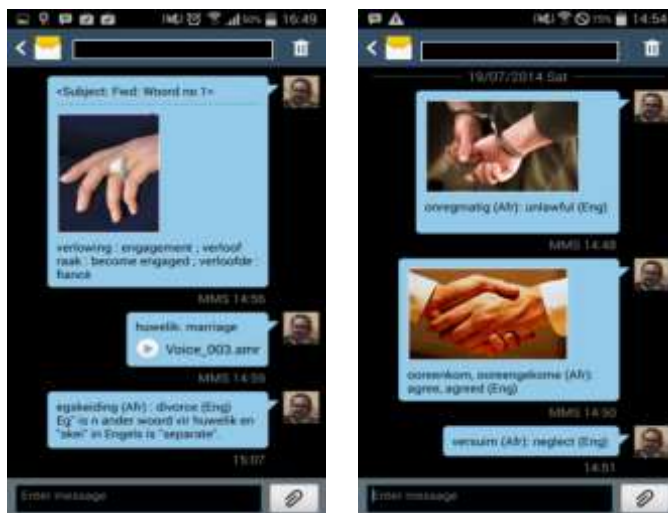


Fig. 1 Screenshots of mini lessons sent by SMS

Deleted: -

The decision to use SMS soon proved to be not in everyone's best interests. Apart from the time it takes to send individual SMSs and the costs involved, it also made everyone aware of other practicalities one has to take into account. One of the students submitted a wrong cell phone number by mistake. When she realised her mistake halfway through the week, she was not sure whether she had received everything (*"I didn't know if I had received them all or not because when I counted them I had 16."*).

During the first week, similar concerns were raised by other group members (see Table 1) relating to the convenience of WhatsApp and the advantages of creating a group as opposed to sending individual messages. Because they received individual SMSs, they were not sure if they received all the words or not. This led to the students (and the researcher) realising the importance of including clear instructions as part of the mini lesson. The obvious solution was to create a WhatsApp group and to include clear instructions that included how many words/lessons they would receive that week (see Figure 2).



Fig. 2 Screenshot of mini vocabulary lesson in WhatsApp containing clear instructions

Over and above the convenience of WhatsApp and it being a free service, a further motivation was the ubiquity of WhatsApp. As far as these students are concerned, SMS is outdated and “everyone” is using WhatsApp.

Now that they were using it as a learning platform, their attention was also drawn to its educational value as a tool for learning and teaching. They realised that not only can it be used to deliver multimedia content, but that these features would help them to remember and understand new vocabulary (see Table 1). Furthermore, it has collaborative features that they can use to interact with fellow group members or the lecturer about a particular word or lesson, thereby opening up the possibility of **collaborative activities**.

Students were clearly more comfortable with the use of WhatsApp, which echoes the conclusion of Bouhnik & Deshen (2014: 217) that the use of WhatsApp in educational settings creates a pleasant learning environment. Using a more familiar app that minimises the possibility of technical difficulties and being sure that everyone receives the same and correct number of lessons contributes to a better learning experience. The fact that students prefer group messages to individual messages coincides with previous research (Lu 2008; Doering *et al.* 2008; Sweeney 2010) indicating their appreciation of a sense of belonging and community. However, it contrasts with Plana *et al.* (2012), which indicates that when students receive individualised SMSs they experience it as highly personalised, creating a sense of receiving private lessons.

4.2 Size and Content Matters

One of the positives of m-learning is the convenience for the student. The student is able to receive and access information and lesson content outside the classroom at any time. The mobility of cell phones allows them to learn in their own preferred time and place (Lu 2008). Throughout the seven weeks, students referred to this convenience (e.g. “*I enjoyed that I wouldn’t lose the words because they were on my phone and that I always had them with me*”).

Having all the lessons cumulating on their phones and everything in one place seemed to be an added advantage when students had to prepare for a test. At the same time it maximised their exposure (Thornton & Houser 2005) to the target language. Over time, this exposure can enhance the information processing activities, making activation and recognition automatic and leading to greater retention (Hulstijn 2001).

During the first 5 weeks, lessons consisted of target words and translations accompanied by different combinations of pictures and voice notes. As a means of scaffolding students’ knowledge and exposure, I decided to include phrases and full sentences during the last two weeks.



Fig. 3 Screenshots of mini vocabulary lessons with words, phrases and sentences

Although students valued the usefulness of learning phrases and sentences, there was a definite preference for shorter lessons containing words as opposed to phrases or sentences. They found the latter more difficult to remember and harder to learn.

This concurs with existing research (Mc Nicol 2004) where students prefer bite-sized lessons because they are more manageable and easier to remember. Also, if one takes into account that it takes more effort to read a longer text on a small screen it seems reasonable to propose that mini vocabulary lessons should indeed be “bite-size”, especially for L2 learners who may find it difficult to deal with large amounts of information that could confuse or demotivate them.

However, although students might prefer shorter lessons or words over sentences, this preference in general seems not to impact on its effectiveness. Alroe & Reinders (2015: 39 - 58) found that with either the use of translation pairs or sentences, there is no difference in the success of the vocabulary acquisition taking place.

Students furthermore enjoyed the lessons containing translations, pictures and voice notes with pronunciation not only because of its novelty and it being “different,” but also because they experienced it as stimulating and helping them to recall the words. The inclusion of sound in the form of voice notes in particular assisted students not only with pronunciation but also helped them to recognise the word when used in a conversation.

When I designed and sent the multimedia mini lessons, I sent the target word first followed by the English translation, picture and a voice note with pronunciation, not thinking that the order would make any difference. However, some of the group members preferred a particular order: first the picture, then the sound clip followed by the Afrikaans word and its English translation. Whether this relates to personal preference or different learning styles is not clear and clearly warrants further research. The observation that some students enjoyed having pictures and sound while others were indifferent to it, allows for no definite conclusion.

Relevant literature such as Read (2000: 40) suggests that learning vocabulary by systematically working through a list of L2 words together with their L1 translations and memorising the pairs provides a good foundation for vocabulary development, particularly in situations where learners have limited exposure to the target language outside the classroom.

However, in a study conducted by Saran & Seferoglu (2010), where students received mini lessons with word definitions, example sentences, related visual presentations and

pronunciations, their findings indicate that visual presentations helped students to understand and remember the words. This was particularly relevant when the text and the rest of the media supported each other.

One should nevertheless bear in mind that some lexical items lend themselves better to be supported by a relevant picture or photo instead of just a definition or translation. The word “computer” can perhaps be better supported by a visual presentation instead of a translation or definition, though having a picture and translation or definition seem to be an added advantage.

As part of the research, I also exposed students to more interactive mini lessons as opposed to the “push-mode” of sending words with L1 equivalents. They received L2 lexical elements and were instructed to find the L1 translations. The following week it was reversed when they received L1 words and had to find L2 translations.

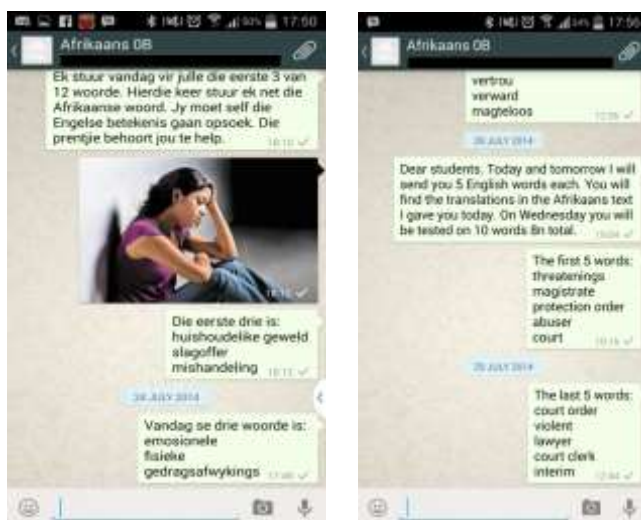


Fig. 4 Screenshots of mini vocabulary lessons with L1 and L2 target words

Although there was an appreciation for both formats and types of self-activity and a sense that it will help them to remember the words, they preferred receiving L2 target words (even though it took them longer to find the English translation in a dictionary) because having the words in front of them helped with remembering the correct spelling.

5. Conclusion and Recommendations

Although this research study has been limited by the fact that it was done on a small scale (future studies should be done with more subjects and over a longer period), the findings nevertheless show that MALL has great potential for vocabulary development in a language like Afrikaans. Although this was done on a small scale, it can just as easily be done in larger groups. When WhatsApp was introduced, it allowed only 15 users per group, which was later increased to 50. In November 2014, it was announced that the maximum was revised and changed to 100. For groups larger than 100, teachers could consider multiple groups, each with its own administrator, as WhatsApp allows unlimited groups.

Furthermore, this study shows that online mini vocabulary lessons such as these can benefit “weaker” students with limited proficiency as well as those with “better” language abilities. It also shows that its integration should be carefully planned, taking into account factors such as the choice of app and the size and content of the mini lesson. It should also not be used in isolation or as a replacement (So 2008) for conventional language learning activities but rather to enhance the conventional, thereby affording students the best of both worlds.

WhatsApp is quick, discreet and uncomplicated, and MALL is without any doubt the next step in the evolution of education technology. The use of mini lessons for vocabulary development proved to be a worthwhile and satisfying experience for students who lack not only proficiency and exposure, but also the confidence to use the target language. This is perhaps best summarised by a student’s comment close to the end of the project: “It [the use of mini lessons] made me realize how much my Afrikaans has expanded because I was able to understand some of the sentences without having to look at the English”.

6. Future Research

In terms of the future of MALL in the South African context, there are still and always will be challenges to overcome. In the meantime, nothing stops language teachers from experimenting with the emerging mobile technologies for language learning and in so doing paving the way for much needed research that can lead to successful curriculum integration.

This research is a step in that direction. It should, however, be noted that this was a preliminary, qualitative study gauging students' experiences of using WhatsApp. For my own research, it serves as a precursor for follow-up quantitative studies that will be able to quantify and measure its effectiveness for Afrikaans vocabulary development.

References

- Alroe, Michael John. & Reinders, H. 2015. The role of translation in vocabulary acquisition: A replication study. *Eurasian Journal of Applied Linguistics* 1: 39 – 58. Retrieved on 01 August 2015 from <http://www.ejal.eu>.
- Butgereit, Laurie. & Botha, Adele. 2009. Hadedda: The Noisy Way to Practice Spelling Vocabulary using a Cell Phone. *IST-Africa 2009 Conference Proceedings*. Retrieved on 01 August 2015 from http://researchspace.csir.co.za/dspace/bitstream/10204/3392/1/Butgereit1_2009.pdf.
- CSIR. 2007. Dr Math: A mobile mathematics tutoring system. Retrieved on 10 July 2015 from http://www.csir.co.za/meraka/Dr_Math.html.
- Bouhnik, D. & Deshen, M. 2014. WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research* 13: 217 – 231.
- Cohavi, A. (2013). How did Whatsapp became the strongest social network? *Calcalist*. Retrieved on 01 July 2015 from <http://www.calcalist.co.il/local/articles/0,7340,L-3593840,00.html>.

- Doering, A., Lewis, C., Veletsianos, G., & Nichols-Besel, K. (2008). Preservice teachers' perceptions of instant messaging in two educational contexts. *Journal of Computing in Teacher Education* 25/1: 5-12.
- Echeverría, A., Nussbaum, M., Calderón, J., Bravo, C., & Infante, C. 2011. Face-to-face collaborative learning supported by mobile phones. *Interactive Learning Environments* 19/4: 351 – 363.
- Ford, M. & Botha, A. 2007. MobilED – An Accessible Mobile Learning Platform for Africa? *IST-Africa 2007 Conference Proceedings*. Retrieved on 01 August 2015 from http://researchspace.csir.co.za/dspace/bitstream/10204/1777/1/Ford1_2007.pdf.
- Geddes, S.J. 2004. Mobile learning in the 21st Century: Benefit for learners. The knowledge tree. Retrieved on 01 September 2014 from <http://knowledgetree.flexiblelearning.net.au/edition06/download/geddes.pdf>.
- Global Entrepreneurship Monitor 2012. Retrieved on 15 July 2014 from <http://www.gemconsortium.org/docs/download/2645>.
- Groupe Speciale Mobile Association (GSMA). 2010. *m-learning: A platform for educational opportunities at the base of the pyramid*. GSMA Development Fund. Retrieved on 15 May 2014 from <http://www.gsma.com/mobilefordevelopment/wpcontent/uploads/2012/04/>.
- Hulstijn, J.H. 2001. Intentional and incidental second language vocabulary learning: a reappraisal of elaboration, rehearsal and automaticity. In *Cognition and Second Language Instruction* (ed. P. Robinson) pp. 258 – 286. Cambridge University Press, Cambridge, UK.
- Kennedy, C. & Levy, M. 2008. L'italiano al telefonino: Using SMS to support beginners' language learning. *ReCALL* 20/3: 315 – 330.
- Lu, M. 2008. Effectiveness of vocabulary learning via mobile phone. *Journal of Computer Assisted Learning* 24: 515 – 525.
- Mc Nicol, T. 2004. Language learning on the move. *Japan Media Review*. Retrieved on 15 August 2014 from: <http://ojr.org/japan/wireless/1080854640.php>.

- Mdlongwana, T. 2012. Information and Communication Technology (ICT) as a Means of Enhancing Education in Schools in South Africa: Challenges, Benefits and Recommendations. *Policy Brief: Africa Institute of South Africa*. Retrieved on 2 June 2015 from <http://www.ai.org.za/wp-content/uploads/downloads/2012/10/No.-80.-ICTas-a-means-of-enhancing-Education-in-Schools-in-South-Africa.pdf>.
- Naismith, L., Lonsdale, P., Vavoula, G., & Sharples, M. 2004. NESTA Futurelab Report 11: Literature Review in Mobile Technologies and Learning. Bristol, UK: NESTA Futurelab. Retrieved on 20 June 2015 from http://www.nestafuturelab.org/research/reviews/reviews_11_and12/11_01.htm.
- Nkosi, Bongani. 2015. “Chalkboards are now a thing of the past – Lesufi” Retrieved on 25 July 2015 from <http://mg.co.za/article/2015-07-21-chalkboards-will-be-a-thing-of-the-past-lesufi-1>.
- Olanof, D. 2012. WhatsApp hits new record with 10 billion total messages in one day. The Next Web. Retrieved on 25 July 2015 from <http://thenextweb.com/apps/2012/08/23/whatsapp-hits-new-record-10-billion-total-messages-one-day/>.
- Plana, M., Torrano, P & Grova, M. 2012. SMS as learning tool: an experimental study. *The EUROCALL Review* 20/2: 33 – 47.
- Read J. 2000. *Assessing Vocabulary*. Cambridge University Press, Cambridge, UK.
- Samuel, O., Botha, A., Ford, M., Tolmay, J. & Krause, C. 2009. Igloo: Mobile Learning System to Facilitate and support Learners and Educators. 2nd International Conference on Adaptive Science & Technology. Retrieved on 01 August 2015 from <http://researchspace.csir.co.za/dspace/handle/10204/3974>.
- So, S. 2009. The development of a SMS-based teaching and learning system. *Journal of Educational Technology Development and Exchange* 21/1: 113 – 124.
- Sweeny, S. M. (2010). Writing for the instant messaging and text messaging generation: Using new literacies to support writing instruction. *Journal of Adolescent & Adult Literacy*, 54(2), 121-130.

- Thornton, P., & Houser, C. (2003). Using mobile web and video phones in English language teaching: Projects with Japanese college students. *Directions in CALL: Experience, experiments & evaluation* 207-224.
- Thornton, P., & Houser, C. (2004). Using mobile phones in education. *Proceedings of the Second International Workshop on Wireless and Mobile Technologies in Education* pp. 3 – 10. IEEE Computer Society, Jungli, Taiwan.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of computer assisted learning* 21/3: 217 – 228.
- Trentin, G. & Repetto, M. (Eds). 2013. *Using Network and Mobile Technology to Bridge Formal and Informal Learning*. Woodhead/Chandos Publishing Limited: Cambridge, UK.
- Tzuk, A. (2013). Whatsapp has 350 million active users a month. [in Hebrew] *Calcalist*. Retrieved on 23 October 2013 from <http://www.calcalist.co.il/internet/articles/0,7340,L-3615097,00.html>.
- South Africa.info. 2014. WhatsApp takes SA mobile phones by storm. Retrieved on 01 August 2015 from: <http://www.southafrica.info/business/trends/newbusiness/whatsapp-210214.htm#ixzz3hZE2cnjm>.

ABOUT THE AUTHOR

Donovan C Lawrence

Afrikaans Department
University of Johannesburg
P.O. Box 524
Auckland Park
2006 Johannesburg

Email address: dclawrence@uj.ac.za

Donovan Lawrence is a senior lecturer in Afrikaans linguistics at the University of Johannesburg. He lectures in Afrikaans Methodology, Sociolinguistics and Lexicography. His main research interest is Computer-Assisted Language Learning and in particular the integration of emerging technologies in the learning and teaching of Afrikaans as an additional language.

Appendix A

Pre-navorsing vraelys

1. VAN / SURNAME:
2. NAAM / NAME:
3. SELFOONNOMMER(S):
4. OUDERDOM: / AGE:
5. WAT IS JOU EERSTE TAAL? / WHAT IS YOUR FIRST LANGUAGE?
6. WAT IS JOU TWEEDE TAAL? / WHAT IS YOUR SECOND LANGUAGE?
7. KAN JY 'N DERDE TAAL PRAAT? (JA OF NEE) / CAN YOU SPEAK A THIRD LANGUAGE?(YES OR NO)
8. INDIEN JA, WATTER TAAL? / IF YES, WHICH LANGUAGE?

9. HOE GOED PRAAT JY AFRIKAANS? / HOW WELL DO YOU SPEAK AFRIKAANS?

SWAK / POOR	GEMIDDELD / AVERAGE	GOED / WELL
-------------	---------------------	-------------

10. HOE GOED LEES JY AFRIKAANS? / HOW WELL DO YOU READ AFRIKAANS?

SWAK / POOR	GEMIDDELD / AVERAGE	GOED / WELL
-------------	---------------------	-------------

11. HOE GOED SKRYF JY AFRIKAANS? / HOW WELL DO YOU WRITE AFRIKAANS?

SWAK / POOR	GEMIDDELD / AVERAGE	GOED / WELL
-------------	---------------------	-------------

12. HOE GOED VERSTAAN JY AFRIKAANS AS JY DAARNA LUISTER? / HOW WELL DO YOU UNDERSTAND AFRIKAANS WHEN LISTENING TO IT?

SWAK / POOR	GEMIDDELD / AVERAGE	GOED / WELL
-------------	---------------------	-------------

13. HOE GEREELD PRAAT JY AFRIKAANS? / HOW OFTEN DO YOU SPEAK AFRIKAANS?

ELKE DAG NODIG IS	'N PAAR KEER PER WEEK	NET IN DIE KLAS OF AS DIT
EVERYDAY NECESSARY	A FEW TIMES PER WEEK	ONLY IN CLASS OR WHEN

14. HOE GEREELD LEES JY AFRIKAANS? / HOW OFTEN DO YOU READ AFRIKAANS?

ELKE DAG NODIG IS	'N PAAR KEER PER WEEK	NET IN DIE KLAS OF AS DIT
EVERYDAY NECESSARY	A FEW TIMES PER WEEK	ONLY IN CLASS OR WHEN

15. HOE GEREELD SKRYF JY IN AFRIKAANS? / HOW OFTEN DO YOU WRITE IN AFRIKAANS?

ELKE DAG	'N PAAR KEER PER WEEK	NET AS DIT NODIG IS
EVERYDAY	A FEW TIMES PER WEEK	ONLY WHEN NECESSARY

16. HOE GEREELD LUISTER JY NA AFRIKAANS?

ELKE DAG	'N PAAR KEER PER WEEK	NET AS DIT NODIG IS
EVERYDAY	A FEW TIMES PER WEEK	ONLY WHEN NECESSARY

Appendix B

How often do you use your cell phone to	Often	Sometimes	Never
make a call	5		
receive a call	5		
send an SMS	4	1	
receive and read an SMS	5		
chat via BBM	3	1	1
chat via WhatsApp	5		
chat via WeChat		1	4
chat via MXit			5
send e-mail	2	3	
receive e-mails	4	1	
play mobile games	3	2	
listen to music	3	2	
listen to online radio		1	4
take and send photos	5		
record and send videos	1	4	
record audio (voice recording)	3	2	

use Facebook	4	1	
use Twitter	1	1	3
use Instagram	2		3
use YouTube	1	3	1
use Google or browse the internet	4	1	
use online dictionaries	2	2	1
If you use your cell phone for any other purposes please elaborate:			